

<b>Notice of Allowability</b>	Application No.	Applicant(s)	<i>1m</i>
	09/925,980	PIERRET ET AL.	
	Examiner	Art Unit	
	Pedro J. Cuevas	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to amendment and request for reconsideration filed on December 1, 2003.
2.  The allowed claim(s) is/are 1-20.
3.  The drawings filed on 01 December 2003 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

5.  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a)  The translation of the foreign language provisional application has been received.
6.  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No. \_\_\_\_\_.
  - (b)  including changes required by the proposed drawing correction filed 01 December 2003, which has been approved by the Examiner.
  - (c)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____.
3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____	7 <input type="checkbox"/> Examiner's Amendment/Comment
4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance
	9 <input type="checkbox"/> Other

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on December 1, 2003. These drawings are acceptable.

### ***Allowable Subject Matter***

2. Claims 1-20 are allowed.

Hartford et al. teaches the construction of a microprocessor-based electronic control system for controlling the various functions of an internal combustion engine comprising:

a stator, and a rotor mounted in the stator;

a regulator circuit connected to the alternator and defining a variable reference voltage; and

a conversion circuit connected with the said regulator circuit, wherein the conversion circuit comprises, in combination:

an internal clock with a controllable variable period, being a voltage controlled oscillator;

a difference circuit connected to the internal clock for producing a difference signal between the period of the said reference control signal and the period of a signal from the internal clock;

a control circuit for the internal clock, connected to the internal clock and the difference circuit, for controlling the clock in response to the said difference signal whereby to equalize the period of the said clock signal with the period of the said control signal, and a bi-directional counter connected to the difference circuit for receiving the said difference pulses and direction signal; and

a voltage pulse width conversion circuit connected to the said clock and comprising a counter adapted to be paced by the said internal clock and to perform a count while the reference control signal is at a given logic level, and a digital/analogue converter connected to the counter for converting a value of count supplied to the converter by the counter into a voltage such as to define the reference voltage of the regulator, and having a memory station input, the alternator further including means for applying to the said input a memory station signal so long as the said reference control signal is at a logic level other than the said given logic level.

3. The following is an examiner's statement of reasons for allowance.

The prior art of record, taken alone or in combination, fails to teach the construction of a motor vehicle alternator as described on independent claims 1 and 11, comprising a stator and a rotor mounted in the stator, a conversion circuit, and a regulator circuit connected in the alternator provided to vary the excitation of the alternator by comparing a signal representing the output voltage of the alternator with a reference voltage.

Dependent claims 2-10 and 12-20 are considered allowable by their respective dependence on allowed independent claims 1 and 11.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas  
January 6, 2004

  
BURTON S. MULLINS  
PRIMARY EXAMINER